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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,739	03/22/2005	Francois Seneschal	FR02 0098 US	6985

65913 7590 07/20/2007  
NXP, B.V.  
NXP INTELLECTUAL PROPERTY DEPARTMENT  
M/S41-SJ  
1109 MCKAY DRIVE  
SAN JOSE, CA 95131

EXAMINER
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CHAN, RICHARD

ART UNIT	PAPER NUMBER
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2618

NOTIFICATION DATE	DELIVERY MODE
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07/20/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

**Office Action Summary**

Application No.

10/528,739

Applicant(s)

SENESCHAL ET AL.

Examiner

Richard Chan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 4/30/07 have been fully considered but they are not persuasive.

With respect to applicant's remarks regarding the status of claims 5 and 6, applicant is advised to refer to the examiner's previous office action, specifically page 6 which includes the examiner's decision with regards to claim 5 and 6 of the present application.

With respect to applicant's arguments with respect to claims 1-3 and 7-9 as being unpatentable over Jacobs in view of Kinkel, the applicant states the neither the Jacobs nor Kinkel reference is concerned with deriving the level of an input signal from the level of the output signal of a processing chain including a set of amplifiers and a selective filter as claimed. However the examiner respectfully points the applicant to the Jacobs reference, specifically to Fig.3 and passage (Col.5 line 65 – Col.6 line 3). An input signal is received by receiver Fig.3 with antenna 80, this signal is then amplified initially by a variable RF amplifier 82 which is controlled by a signal from LPF module 112. This signal originates from level detector 110 which is derived from the output of a pilot filter module 108, which is obtained from the output of amplifier 96. Therefore the level of the input signal at the initial amplification stage 82 is derived from the level of the output signal of a processing chain (82, 84, 88, 90, 92, and 96) which includes a set of amplifiers (82, 90, 96) and a selective filter (88).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Kinkel reference is used to show the use of real gain of a selected filter is given by a set of equations defined by a set of coefficients.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs (US 4,573,208) in view of Kinkel (US 4,855,689).

With respect to claim 1, Jacobs discloses the device Fig.4 for determining the level of an input signal from antenna 132 intended to be applied to a receiving system, said receiving system comprising arranged in series a set of discrete gain amplifiers 134

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and 148, a selective filter 140, a mixer 136, said receiving system being intended to deliver an output signal from output of amplifier 150, said device comprising: measuring means 210 for measuring the level of said output signal in a given frequency channel, means 210 for determining the real gain of said set of amplifiers 134 and 148 in said given frequency channel, however Jacobs does not specifically disclose means for determining the real gain of said selective filter in said given frequency channel, calculation means for deriving the level of the input signal from the level of the output signal, the real gain of said set of amplifiers and from the real gain of said selective filter.

The Kinkel reference however discloses wherein filter 69 in Fig.2 employs an operational amplifier 75, which controls the gain of the filtered signal. (Col.6 lines 40-55)

It would have been obvious to one of ordinary skill in the art to implement the filter with an amplifier to control the gain of the filtered signal through the receiver system as disclosed by Jacob in order to obtain the correct gain for incoming signal.

With respect to claim 2, Jacobs and Kinkel combined disclose the device as claimed in claim 1, Kinkel continues to disclose where the real gain of said selective filter is given by a set of equations defined by a set of coefficients depending on said frequency channel. The resistors and capacitors set the coefficients depending on their value the frequency of the incoming signal, which than defines the gain of the amplifier 75. (Col.6 lines 40-55) and Claim 6

With respect to claim 3 Jacobs and Kinkel combined disclose the device as claimed in claim 2, Jacobs continues to disclose the device comprising additional means 174 for averaging the level of said output signal. Col.7 lines 38-60

With respect to claim 7, Jacobs discloses the method for determining the level of an input signal from antenna 132 intended to be applied to a receiving system Fig.4 said receiving system comprising arranged in series a set of discrete gain amplifiers 134 and 148, a selective filter 140, a mixer 136, said receiving system being intended to deliver an output signal from amplifier 150, said method comprising: a measuring step for measuring the level of said output signal in a given frequency channel, a processing step 210 for determining the real gain of said set of amplifiers 134 and 148 in said given frequency channel, a first calculation step (204) for determining the real gain ( $G_2$ ) of said selective filter 140 in said given frequency channel, however Jacobs does not specifically disclose a second calculation step for deriving the level of the input signal from the level of the output signal, from the real gain of said set of amplifiers and from the real gain of said selective filter.

The Kinkel reference however discloses wherein filter 69 in Fig.2 employs an operational amplifier 75, which controls the gain of the filtered signal. (Col.6 lines 40-55)

It would have been obvious to one of ordinary skill in the art to implement the filter with an amplifier to control the gain of the filtered signal through the receiver system as disclosed by Jacob in order to obtain the correct gain for incoming signal.

With respect to claim 8, Jacobs and Kinkel combined disclose the receiving box for multimedia signals, or modem comprising a device as claimed in claim 1.

With respect to claim 9, Jacobs and Kinkel combined disclose the signal generated by the method as claimed in claim 7, said signal indicating the level of the input signal with comparator 210.

3. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs (US 4,573,208) and Kinkel (US 4,855,689) in view of Narumi (US 6,118,811).

With respect to claim 4, Jacobs and Kinkel combined disclose the device as claimed in claim 3, however neither references specifically discloses the device comprising additional means for rounding the level of said input signal to the nearest half value.

However Narumi discloses the device 122 comprising additional means for rounding the level of said input signal to the nearest half value. Fig.1

It would have been obvious to one of ordinary skill in the art to implement an analog to digital converter as disclosed by Narumi with the device that determines the input signal as disclosed by Jacobs and Kinkel combined in order to obtain a digital signal of the reading of the analog input signal which can then be processed by a DSP.

With respect to claim 5, Jacobs, Kinkel, and Narumi combined disclose the device as claimed in claim 4, Kinkel continues to disclose where the real gain of said set of amplifiers is given by a look-up table with two inputs TABLE 1 Col.13, a first input corresponding to said given frequency channel, a second input corresponding to the nominal gain of said amplifiers.

With respect to claim 6, Jacobs, Kinkel, and Narumi combined disclose the device as claimed in claim 5, Kinkel continues to disclose where said measuring means comprise arranged in series a selective filter 36 for selecting said given frequency channel, a logarithmic detector 102, Fig.3 and an analog-to-digital converter 122 for delivering the level of said output signal in said given frequency channel.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chan whose telephone number is (571) 272-0570. The examiner can normally be reached on Mon - Fri (9AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richard Chan  
Art Division 2618  
7/6/07



  
**NAY MAUNG**  
**SUPERVISORY PATENT EXAMINER**